

**LAHORE UNIVERSITY OF MANAGEMENT SCIENCES**  
Department of Electrical Engineering

**EE240 Circuits I**  
**Quiz 01**

Name: \_\_\_\_\_

Campus ID: \_\_\_\_\_

Total Marks: 10

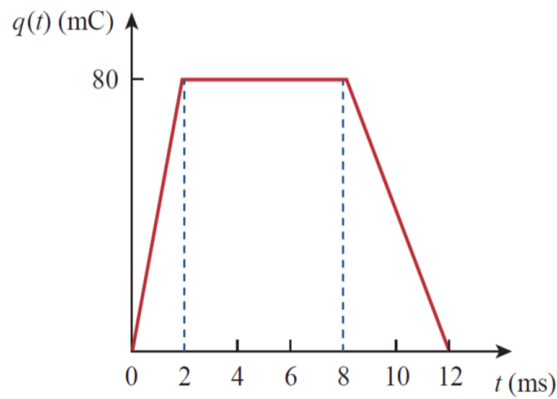
Time Duration: 15 minutes

**Question 1** (4 marks)

Determine the total charge entering a terminal of an electrical component between  $t = 1$  s and  $t = 2$  s if the current passing the terminal is  $i(t) = 3t^2 - t$  A.

**Question 2** (3 marks)

Find the current at  $t = 6$  ms and at  $t = 10$  ms if the charge entering a certain element is shown below.



**Question 3** (3 marks)

For the circuit given below, calculate the power dissipated or supplied by each element.

